AMENDMENTS TO THE CLAIMS

Claim 1 (Currently Amended): A method of screening for an agent that alters adipose tissue development said method comprising:

contacting a cell comprising a *Lpin1* gene encoding a polypeptide comprising an NLIP domain and a CLIP domain, with a test agent; and

detecting a change in the expression or activity of a *Lpin1* gene product as compared to the expression or activity of a *Lpin1* gene product in a cell that is contacted with the test agent at a lower concentration, where a difference in the expression or activity of said *Lpin1* gene product ~~lipin~~ in the contacted cell and the cell that is contacted with the lower concentration indicates that said agent alters adipose tissue development.

Claim 2 (Original): The method of claim 1, wherein said lower concentration is the absence of said test agent.

Claim 3 (Original): The method of claim 1, wherein the amount of *Lpin1* gene product is detected by detecting *Lpin1* mRNA in said sample.

Claim 4 (Original): The method of claim 3, wherein said level of *Lpin1* mRNA is measured by hybridizing said mRNA to a probe that specifically hybridizes to a *Lpin1* nucleic acid.

Claim 5 (Original): The method of claim 4, wherein said hybridizing is according to a method selected from the group consisting of a Northern blot, a Southern blot using DNA derived from the *Lpin1* RNA, an array hybridization, an affinity chromatography, and an in situ hybridization.

Claim 6 (Original): The method of claim 4, wherein said probe is a member of a plurality of probes that forms an array of probes.

Claim 7 (Original): The method of claim 3, wherein the level of *Lpin1* mRNA is measured using a nucleic acid amplification reaction.

Claims 8-9 (Canceled).

Claim 10 (Original): The method of claim 1, wherein said cell is cultured *ex vivo.*

Claim 11 (Original): The method of claim 1, wherein said test agent is contacted to an animal comprising a cell containing the *Lpin1* nucleic acid or the lipin protein.

Claim 12 (Currently Amended): A method of prescreening for an agent that alters adipose tissue development, said method comprising:

i) contacting a ~~*Lpin1*~~ nucleic acid encoding a polypeptide comprising an NLIP domain and a CLIP domain ~~or a lipin protein~~ with a test agent; and

ii) detecting specific binding of said test agent to said ~~lipin protein or~~ nucleic acid.

Claim 13 (Original): The method of claim 12, further comprising recording test agents that specifically bind to said *Lpin1* nucleic acid or protein in a database of candidate agents that alter adipose tissue development.

Claims 14-15 (Canceled).

Claim 16 (Original): The method of claim 12, wherein said test agent is not a nucleic acid.

Claim 17 (Canceled).

Claim 18 (Original): The method of claim 12, wherein said detecting comprises detecting specific binding of said test agent to said *Lpin1* nucleic acid.

Claim 19 (Original): The method of claim 18, wherein said binding is detected using a method selected from the group consisting of a Northern blot, a Southern blot using DNA derived from a *Lpin1* RNA, an array hybridization, an affinity chromatography, and an in situ hybridization.

Claims 20-21 (Canceled).

Claim 22 (Original): The method of claim 12, wherein said test agent is contacted directly to the *Lpin1* nucleic acid or to the lipin protein.

Claim 23 (Original): The method of claim 12, wherein said test agent is contacted to a cell containing the *Lpin1* nucleic acid or the lipin protein.

Claim 24 (Original): The method of claim 23, wherein said cell is cultured *ex vivo*.

Claim 25 (Original): The method of claim 12, wherein said test agent is contacted to an animal comprising a cell containing the *Lpin1* nucleic acid or the lipin protein.

Claims 26-63 (Canceled).